



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### Air Quality - Part 70 Operating Permit Amendment

**Facility Name:** Appling County Pellets LLC  
**Facility Address:** 248 Sweetwater Drive  
Baxley, Georgia 31513 (Appling County)  
**Mailing Address:** 248 Sweetwater Drive  
Baxley, Georgia 31513  
**Parent/Holding Company:** FRAM Renewable Fuels, LLC  
**Facility AIRS Number:** 04-13-001-00032

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit for:

**The operation of a wet electrostatic precipitator (WESP), regenerative thermal oxidizer (RTO) and to replace all conditions in Section 2 to Section 6 of the permit.**

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. **2499-001-0032-V-02-0**. Unless modified or revoked, this Amendment expires upon issuance of the next Part 70 Permit for this source. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. **TV-406527** dated **July 5, 2019, February 3, 2020 and July 5, 2021**; any other applications upon which this Amendment or Permit No. **2499-001-0032-V-02-0** are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **23** pages.



DRAFT

Richard E. Dunn, Director  
Environmental Protection Division

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**PART 1.0 FACILITY DESCRIPTION****1.3 Process Description of Modification**

Green wood and dry material are trucked to the facility and stored. Green wood first passes through the green hammermill (GHM) prior to the dryer (DRY). Process heat is provided by a 63 MMBtu/hr bark burner (BUR1). Rotary Dryer (DRY) output combined with dry material and then conveyed to two (2) dry hammermills (DHM1 and DHM2) and processed through ten (10) pellet mills (PM1 – PM10) and one of two (2) pellet coolers (PC1, PC2). Various pellet handling and storage (PHS) operations take place prior to shipping. Particulate matter (PM), volatile organic compound (VOC), and hazardous air pollutant (HAP) emissions from the heat source (BUR1), dryer (DRY), and pellet mills (PM1 – PM10) are controlled by a Wet Electrostatic Precipitator (WESP) and Regenerative Thermal Oxidizer (RTO). Particulate matter (PM) emissions from Dry hammermills (DHM1, DHM2) emissions are controlled by a bin vent (BV). Particulate matter (PM) emissions from the pellet coolers pellet coolers (PC1, PC2) are controlled with a baghouse (BGH).

**PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY****2.1 Facility Wide Emission Caps and Operating Limits**

- 2.1.1 The Permittee shall not discharge or cause the discharge into the atmosphere from the facility any emissions which contain volatile organic compounds (VOC) in excess of 249 tons during any twelve consecutive month period.  
[Avoidance of 40 CFR 52.21 (PSD)]
- 2.1.2 The Permittee shall not discharge or cause the discharge into the atmosphere from the facility, any single hazardous air pollutant (HAP) in an amount equal to or exceeding 10 tons during any twelve consecutive month period, or any combination of such listed pollutants in an amount equal to or exceeding 25 tons during any twelve consecutive month period.  
[Avoidance of Major Source Classification under 40 CFR 63]
- 2.1.3 The Permittee shall not process more than 175,000 oven dried tons (ODT) of wood from the dryer (DRY) during any twelve consecutive months.  
ODT = weight of wood in short tons at 11% moisture (nominal).  
[391-3-1-.03(8)(a) and Avoidance of Major Source MACT per 40 CFR 63]
- 2.1.4 The Permittee shall not process more than 350,000 tons (TONS) of wood through the dry hammermill (DHM1, DHM2), pellet mills (PM1-PM10), pellet coolers (PC1, PC2), and pellet handling/storage (PHS) during any twelve consecutive months.  
TONS = weight of wood in short tons at 5% moisture, nominal.  
[391-3-1-.03(8)(a) and Avoidance of Major Source MACT per 40 CFR 63]
- 2.1.5 The Permittee shall not process more than fifty (50) percent green softwood by total weight in the rotary dryer (DRY) during any thirty (30) day consecutive period.  
[391-3-1-.03(8)(a), Avoidance of Major Source MACT per 40 CFR 63]

**2.2 Facility Wide Federal Rule Standards**

None applicable.

**2.3 Facility Wide SIP Rule Standards**

None applicable.

**2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit**

None applicable.

**PART 3.0 REQUIREMENTS FOR EMISSION UNITS**

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

**3.1.1 Emission Units**

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
GHM	Green Hammermill	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	N/A	N/A
BUR	65 MMBtu/hr Heat Source – Bark Burner GTS Reciprocating Grate Furnace	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)(2)	WESP RTO	Wet Electrostatic Precipitator Regenerative Thermal Oxidizer
DRY	Rotary Wood Dryer rated at 20 oven dried tons (ODT) per hour @ 11% moisture	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)		
DHM1, DHM2	Dry Hammermills rated 20 ODT per hour each @ 11% moisture	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	BV	Bin Vent
PM1-PM10	Ten (10) Pellet Mills	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	WESP RTO	Wet Electrostatic Precipitator Regenerative Thermal Oxidizer
PC1, PC2	Two (2) Pellet Coolers rated at 20 ODT per hour each @ 5% moisture	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	BGH	Baghouse
PHS	Pellet Handling and Storage System	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	NA	NA

\* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

**3.2 Equipment Emission Caps and Operating Limits**

- 3.2.1 The Permittee shall operate and maintain the WESP and the RTO during all periods in which the Heat Source (BUR), the Dryer (DRY) and the Pellet Mills (PM1-PM10) are in operation.  
[391-3-1-.03(2)(c)]
- 3.2.2 The Permittee shall operate and maintain the bin vent (BV) and baghouse (BGH) during all periods in which the dry hammermills (DHM1, DHM2) and pellet coolers (PC1, PC2) are in operation.  
[391-3-1-.03(2)(c)]

- 3.2.3 The Permittee shall not process any wood chips in the dryer DRY unless the three hour rolling average of the RTO combustion temperature is above 1500°F or the temperature established during the most recent destruction efficiency test.  
[391-3-1-.03(2)(c) and Avoidance of 40 CFR Part 63]

### 3.3 Equipment Federal Rule Standards

None Applicable

### 3.4 Equipment SIP Rule Standards

- 3.4.1 The Permittee shall not cause, let, permit, suffer or allow the rate of emissions from the wood dryer (DRY), hammer mills (DHM1, DHM2) and pellet mills/coolers (PM1-PM10, PC1-PC2), particulate matter in total quantities equal to or exceeding the allowable rate calculated as follows:

$E = 4.1P^{0.67}$ ; for process input weight rate up to and including 30 tons per hour, or  
 $E = 55P^{0.11} - 40$ , for process input weight above 30 tons per hour

Where:

E = emission rate in pounds per hour

P = process input weight rate in tons per hour

[391-3-1-.02(2)(e)1.(i)]

- 3.4.2 The Permittee shall not cause, let, suffer, permit or allow emissions from any process stack, the opacity of which is equal to or greater than forty (40) percent.  
[391-3-1-.02(2)(b)]

- 3.4.3 The Permittee shall not combust any fuel with a sulfur content exceeding 2.5 weight percent in any combustion equipment. The Permittee shall comply with this rule by only burning wood, natural gas or propane.  
[391-3-1-.02(2)(g)2]

- 3.4.4 The Permittee shall take all reasonable precautions to prevent fugitive dust from becoming airborne. Fugitive dust sources include but are not limited to sources identified by the following (BUR, DRY, DHM1, DHM2, PM1-PM10, PC1-PC2 and PHS). Reasonable precautions that should be taken to prevent dust from becoming airborne include, but are not limited to, the following:  
[391-3-1-.02(2)(n)1]

- a. Application of water on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts
- b. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials.
- c. Covering, always when in motion, open bodied trucks, transporting materials likely to give rise to airborne dusts.

- d. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.
- e. Daily blow down of all interior equipment.
- f. Daily cleaning of the floor to minimize dust accumulation on the floor.
- g. Periodic inspection, maintenance and replacement of sawdust and biomass pellet loadout boots as recommended by the manufacturer.
- h. The storage of the pellet will be in a warehouse enclosed by at least three sides to minimize fugitive emissions.

- 3.4.5 The Permittee shall retain a record of all the actions taken to minimize fugitive emissions in a log suitable for inspection or submittal to the Division, upon request. The opacity from the fugitive emission sources shall not equal or exceed 20%.  
[391-3-1-.02(2)(n)2]

**3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit**

- 3.5.1 Routine maintenance shall be performed on all air pollution control equipment. Maintenance records shall be in a form suitable for inspection or submittal to the Division and shall be maintained for a period of five (5) years from date of entry.  
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]
- 3.5.2 The Permittee shall maintain an inventory of baghouse filter bags such that an adequate supply of bags is on hand to replace any defective ones.  
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]
- 3.5.3 The Permittee shall operate all air pollution control devices whenever the associated equipment is being operated.  
[391-3-1-.03(8)(a)]

**PART 4.0 REQUIREMENTS FOR TESTING****4.1 General Testing Requirements**

- 4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division (“Division”). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.  
[391-3-1-.02(6)(b)1(i)]
- 4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test and shall provide with the notification a test plan in accordance with Division guidelines.  
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]
- 4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:
- a. Method 1 shall be used for the determination of sample point locations.
  - b. Method 2 shall be used for the determination of stack gas flow rate.
  - c. Method 3 or 3A shall be used for the determination of stack gas molecular weight. Method 3B shall be used for the determination of emission rate correction factor or excess air. Method 3A may be used as an alternative.
  - d. Method 4 shall be used for the determination of stack gas moisture.
  - e. Method 5/Method 202 shall be used for determination of total PM emissions, to include condensable particulates + filterable particulates. Method 5 (filterable PM) shall be used for determining compliance with Georgia Rule (e).
  - f. Method 7 or 7E shall be used for determination of NO<sub>x</sub> emissions.
  - g. Method 9 and the procedures of the above referenced document shall be used to determine the opacity.
  - h. Method 10 shall be used for the determination of CO concentrations.
  - i. Method 19 shall be used when applicable; to convert particulate matter, carbon monoxide, and nitrogen oxides concentrations (i.e., grains/dscf for PM, ppm for gaseous pollutants), as determined using other methods specified in this section, to mass emission rates (i.e., lb/MM Btu, lb/hr).



- i. Method 26 or 26A shall be used to determine Hydrogen Chloride emission concentrations.
- j. Method 25A shall be used for the determination of VOC concentrations in the dryer exhaust stacks.
- k. NCASI 105.1 shall be used for the determination of methanol, formaldehyde, and acetaldehyde concentrations.
- l. Modified EPA OTM-26 Interim VOC Measurement Protocol for the Wood Products Industry (July 2007) or (WPP1) shall be used for the calculation and summation of VOC emissions.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

- 4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.

[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

## 4.2 Specific Testing Requirements

- 4.2.1 All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.  
[391-3-1-.02(6)(b)1]
- 4.2.2 By June 30, 2023, the Permittee shall conduct performance tests for Carbon Monoxide (CO) and Nitrogen Oxide (NOx) emissions from the Bark Burner (BUR) and the Wood Dryer (DRY) at the WESP/RTO exhaust Stack. During the testing, the facility will establish temperature ranges for the RTO temperature that are reflective of the operation at the time of testing and submit such data along with the performance test results. The CO test and the NOx test shall be conducted simultaneously. The Permittee shall also monitor and record the WESP operating parameters such as the water flow rate and the secondary voltage and current and the amount of wood dried, percentage of green softwood during the performance test runs. Subsequent performance tests shall be conducted once every 48 months.  
[391-3-1-.02(6)(b)1(i)]

- 4.2.3 By June 30, 2023 the Permittee shall conduct performance tests for the bark burner (BUR), dryer (DRY), dry hammermills (DHM1, DHM2), and pellet coolers (PC1, PC2) total particulate matter (TPM), volatile organic compounds (VOC), formaldehyde, acetaldehyde, and methanol emissions. EPA OTM-26 shall be used for testing VOC, formaldehyde, acetaldehyde, and methanol emissions. Testing shall be conducted while the Dryer, Hammermill, Pellet mills and Pellet coolers are operating at maximum capacity. During the testing, the Permittee shall establish pressure drop ranges for hammer mill bin vent filter (BV) and the pellet cooler baghouse (BGH) that are representative of the operation at the time of testing in addition to the operating parameters for the WESP and RTO bed temperature, including the amount of wood dried, percent green softwood and WESP total power. These measurements shall be submitted along with the test reports. Subsequent performance tests shall be conducted once every 48 months.  
[391-3-1-.02(6)(b)1(i)]
- 4.2.4 If any emission factor derived from the results of any testing required in Condition 4.2.2 and Condition 4.2.3 exceed the emission factors listed in Section 6, the Permittee shall submit a permit application within 120 days after testing, (a) submit a permit application requesting the use of the newer emission factor or (b) demonstrate that the emission factor derived is not representative of normal emissions.  
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]
- 4.2.5 The Permittee shall not use monitors or test equipment during performance tests that are not used in normal day to day operations of the facility, to adjust/fine tune the burners prior to performance testing. The Permittee shall record and submit all preliminary test data conducted within the period of one day prior to and one day after the performance test, if so, requested by the Division.  
[391-3-1-.02(3) and 391-3-1-.03(2)(c)]

## **PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**

### **5.1 General Monitoring Requirements**

- 5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.  
[391-3-1-.02(6)(b)1]

### **5.2 Specific Monitoring Requirements**

- 5.2.1 The Permittee shall install, calibrate, maintain, and operate systems to monitor the dried wood rate (ODT/hr) exiting the dryer (DRY), the dry Hammermills (DHM1, DHM2) process rate and the pellet production rate (ton/hr) through the Pellet Cooler (PC01-02) and the pellet mills (PM1-PM10). The data shall be recorded hourly per Performance specification(s) of the Division's monitoring requirements.  
[391-3-1-.02(6)(b)1]

- 5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. [391-3-1-.02(6)(b)1]
- The secondary voltage for each field of the WESP. Such devices shall have a required accuracy of  $\pm 2\%$ .
  - The secondary current for each field of the WESP. Such devices shall have a required accuracy of  $\pm 2\%$ .
  - Water flow to the WESP. Such devices shall have a required accuracy of  $\pm 2\%$ .
  - The RTO average bed temperatures. The temperature monitoring device shall have an accuracy of  $\pm 2\%$  ( $^{\circ}\text{F}$ ).
- 5.2.3 The Permittee shall, using the data required to be recorded by Condition 5.2.2, determine the total power for each hour of operation. Total WESP power shall be calculated using the following equation:  
[391-3-1-.02(6)(b)1]

$$P_t = \sum_{i=1}^n V_i I_i$$

Where:

$P_t$  = Total Wet ESP power (watts)

$V_i$  = secondary voltage (kV) in WESP field i

$I_i$  = secondary current (ma) in WESP field i

$n$  = Total number of fields in WESP

$i$  = ith field in WESP ( $i = 1$  to  $n$ )

- 5.2.4 The Permittee shall calculate three-hour average WESP power using data collected per Condition 5.2.2 and calculated per Condition 5.2.3. The Permittee shall ensure that the total WESP power is maintained not less than 20% below the level determined by the most recent performance test. If the three-hour average falls below the relevant minimum operating power, the Permittee shall record this as an excursion and take corrective action. This corrective action and the results shall be recorded in the log that shall be available for submission to the Division or Inspection by the Division personnel, upon request.  
[391-3-1-.02(6)(b)1]
- 5.2.5 The RTO bed temperature data should be recorded continuously when the Burner/Wood Dryer and Pellet mills are operating. This data should be used to calculate hourly averages of RTO bed temperature. The hourly average RTO bed temperature data shall be used to calculate the three-hour rolling averages of the RTO bed temperature for each hour of operation. If the three-hour rolling average falls below the minimum operating RTO bed temperature in Condition 3.2.3 (until the average RTO bed temperature is established per Condition 4.2.2) or the RTO bed temperature established per Condition 4.2.2, the Permittee shall record this in a log as an excursion and take action to bring the RTO bed temperature above the minimum temperature. This action and the results shall be recorded in the log that shall be available for submission to the Division or inspection by Division personnel, upon request.  
[391-3-1-.02(6)(b)1]

- 5.2.6 The Permittee shall install, calibrate, maintain, and operate pressure drop indicators on the dry hammer mills(DHM1, DHM2) bin vent filter (BV) and the pellet coolers (PC1, PC2) baghouse (BGH). Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. The Permittee shall read and record the pressure drops at least once per operating day. A logbook containing these records shall be available for inspection and/or submittal to the Division, upon request.  
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 5.2.7 The Permittee shall implement a Preventive Maintenance Program for the pellet coolers (PC1, PC2) baghouse (BGH). All QA/QC practices and criteria shall be stated in the Preventative Maintenance Program. The program shall be subject to review and if necessary, to assure compliance, modification by the Division. At a minimum, the following operation, and maintenance checks shall be made on at least a weekly basis, and a record of the findings and corrective actions taken shall be kept in a maintenance log:  
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. Check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.
  - b. Check dust collector hoppers and conveying systems for proper operation.
  - c. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication and proper operation of timer and valves.
  - d. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.
  - e. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mounting; proper operation of outlet/isolation valves; proper lubrication.
- 5.2.8 The Permittee shall perform the following applicable operation and maintenance checks on the dry hammermills (DHM1, DHM2) bin vent (BV) and retain a record suitable for inspection or submittal for each week or portion of each week of operation. A checklist or other similar log may be used for this purpose:  
[391-3-1-.02(6)(b)1]
- a. Check exterior of the units for holes in the body or evidence of malfunction.
  - b. Check hopper for bridging and plugging as applicable.
  - c. Check particulate transfer device for proper operation to ensure dust removal. Any adverse condition discovered by this inspection shall be corrected in the most expedient manner possible. The Permittee shall record the incident as an excursion and note the corrective action taken.

5.2.9 The Permittee shall perform daily visible emissions checks (VE) on the dryer WESP/RTO exhaust, Dry Hammermills (DHM1, DHM2) Bin Vent (BV) filter exhaust and the Pellet coolers (PC1, PC2) baghouse (BGH) exhaust while the equipment is operating at the normal expected operating rate for each day of operation. The Permittee shall retain a record in a VE log, suitable for inspection and/or submittal to the Division, upon request. The checks shall be conducted using the procedure below except when atmospheric conditions or sun positioning prevent any opportunity to perform the daily VE check. Any operational day when atmospheric conditions or sun positioning prevent a daily reading shall be reported as monitor downtime in the VE log.  
[391-3-1-.02(6)(b)1]

- a. Determine, in accordance with the procedures specified in paragraph c of this condition, if visible emissions are present at the discharge point to the atmosphere and record the results in the daily VE log. For sources that exhibit visible emissions, the Permittee shall comply with paragraph b of this condition.
- b. For each source that exhibits visible emissions, the Permittee shall determine the cause of that visible emission and correct the problem in the most expedient manner possible. The Permittee shall note the cause of the visible emission, the pressure drop, the raw material feed rate, any other pertinent operating parameters and the corrective action taken in the log described above.
- c. The person performing the determination shall stand at a distance of at least 15 feet sufficient to provide a clear view of the plume against a contrasting background with the sun in the 140° sector at his/her back. Consistent with this requirement, the determination shall be made from a position such that the line of vision is approximately perpendicular to the plume direction. Only one plume shall be in the line of sight at any time when multiple stacks are in proximity to each other.

5.2.10 The Permittee shall perform a check of visible emissions from all fugitive emission sources including the sources listed in Condition 3.4.4. The Permittee shall retain a record in a daily visible emissions (VE) log suitable for inspection or submittal, upon request. The check shall be conducted at least once for each day or portion of each day of operation using procedures a. through c. below except when atmospheric conditions or sun positioning prevent any opportunity to perform the daily VE check. Any operational day when atmospheric conditions or sun position prevent a daily reading shall be reported as monitor downtime in the report required by Condition 6.1.4. The inspection shall include, at a minimum, a check of the working condition of dust control measures such as loadout boots and a verification that baghouses and filters used to minimize fugitive dust are operating.  
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Check of the working condition of dust control measures such as loadout boots.
- b. Verify that baghouses and filters, used to minimize fugitive dust are operating.

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- c. Documentation of any visible emissions present from any fugitive dust source, including but not limited to the green hammermills (GHM), pellet storage and handling (PSH) operations and the wood piles. Any adverse condition discovered by this inspection shall be corrected in the most expedient manner possible. The Permittee shall record the incident as an excursion and note the corrective action taken.

- 5.2.11 The following pollutant specific emission unit(s) (PSEU) are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Control	Pollutant
Burner/Dryer (BUR/DRY) and pellet mills (PM1-PM10)	WESP/RTO	PM, VOC
Dry hammermills (DHM1, DHM2)	BV	PM
Pellet coolers (PC1, PC2)	BGH	PM

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9. [40 CFR 64]

- 5.2.12 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from burner/dryer (BUR/DRY) and pellet mills (PM1-PM10). [40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 WESP Secondary Power
A. Representativeness [64.3(b)(1)]	Total power greater than or equal to 80% of the power during the most recent filterable PM performance test for three consecutive readings
B. Verification [64.3(b)(2)]	N/A
C. QA/QC Criteria [64.3(b)(3)]	Routine maintenance and annual calibration checks
D. Frequency [64.3(b)(4)]	Continuous
E. Data Collection [64.3(b)(4)]	Data Logger
F. Averaging Period [64.3(b)(4)]	3 hours

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- 5.2.13 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from the dry hammermills (DHM1, DHM2) and the pellet coolers (PC1, PC2).  
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Visible Emission	Indicator No. 2 Pressure Drop
A. Representativeness [64.3(b)(1)]	Daily VE check	1" to 10" W.C.(for BH1)
B. Verification [64.3(b)(2)]	N/A	N/A
C. QA/QC Criteria [64.3(b)(3)]	N/A	Pressure gauges are calibrated and maintained per manufacturer specs.
D. Frequency [64.3(b)(4)]	Daily	Daily
E. Data Collection [64.3(b)(4)]	VE log	Pressure drops are recorded electronically by a Data logger
F. Averaging Period [64.3(b)(4)]	6 minutes	N/A

- 5.2.14 The Permittee shall comply with the performance criteria listed in the table below for the VOC emissions from the burner (BUR)/Dryer (DRY) and Pellet mills (PM1-PM10).  
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	RTO temperature
A. Representativeness [64.3(b)(1)]	Thermocouples measure the average bed temperature; not less than 1500 °F (until minimum average bed temperature are established per Condition 4.2.2) or the minimum average bed temperature are established per Condition 4.2.2.
B. Verification [64.3(b)(2)]	n/a
C. QA/QC Criteria [64.3(b)(3)]	Temperature ranges and minimum temperature are established during performance testing. Thermocouples replaced per manufacturer suggested intervals
D. Frequency [64.3(b)(4)]	Continuous
E. Data Collection [64.3(b)(4)]	Temperature is recorded electronically using a data logger
F. Averaging Period [64.3(b)(4)]	3 hour average

**PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS****6.1 General Record Keeping and Reporting Requirements**

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry. [391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.

[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken. [391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

b. Total process operating time during each reporting period.



- c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.
  - d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
  - e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
  - f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- 6.1.5 Where applicable, the Permittee shall keep the following records:  
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]
- a. The date, place, and time of sampling or measurement;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
- 6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance, and records.  
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]
- 6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:  
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
- i. Any twelve consecutive month period for which the total amount of wood dried in the wood dryer, recorded in accordance with Conditions 6.2.1, exceeds 175,000 oven dried tons at 11% moisture.
  - ii. Any rolling twelve consecutive month total of VOC emissions from the pellet manufacturing operation calculated per condition 6.2.10 equal to or exceeds 249 tons.
  - iii. Any rolling twelve consecutive month totals for a single HAP or total HAPs from the pellet manufacturing operation calculated per condition 6.2.15 that equals or exceeds 10 tons or 25 tons, respectively.
  - iv. Any monthly softwood processed and recorded as required by Condition 6.2.9 that does not meet the requirement of Condition 3.2.3.
  - v. Any twelve consecutive month period for which the total amount of wood processed in the pellet mills, pellet coolers, pellet handling and storage system, recorded in accordance with Condition 6.2.1, exceeding 350,000 tons.
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
- i. Any instance in which daily pressure drop readings of the dry hammermills (DHM1, DHM2) bin vent (BV) and/or the pellet coolers (PC1, PC2) baghouse (BGH) (measured in accordance with Condition 5.2.6) is/are outside of the established range for two consecutive days.
  - ii. Any two consecutive required daily determinations of visible emissions requiring action by Condition 5.2.9 and Condition 5.2.10 from the same source.
  - iii. Any three hour average RTO bed temperature (measured in accordance with Condition 5.2.2 and calculated in accordance with Condition 5.2.5) below 1500 °F or the temperature established during the most recent destruction efficiency test.

- iv. Any three-hour average WESP total power (measured in accordance with Condition 5.2.2 and calculated in accordance with Conditions 5.2.3 and 5.2.4) below 80 percent of the value determined during the most recent performance test.
- v. Any failure to perform the weekly dry hammermills (DHM1, DHM2) bin vent (BV) or pellet cooler baghouse (BGH) inspections (monitored in accordance with Conditions 5.2.7 and 5.2.8).
- vi. Any failure to perform the daily determinations of point source visible emissions from the WESP/RTO, Dry Hammermills (DHM1, DHM2) Bin Vent (BV) filter exhaust, and/or pellet coolers (PC1, PC2) baghouse (BGH) (monitored in accordance with Conditions 5.2.9).
- vii. Any two consecutive daily determinations of point source visible emissions requiring action under Condition 5.2.9 from the same source.
- viii. Any failure to perform the daily inspections of all sources of fugitive dust emissions (monitored in accordance with Condition 5.2.10).
- ix. Any two consecutive daily determinations of fugitive source visible emissions requiring action under Condition 5.2.10 from the same source.
- x. Specific identification of each period of excursion described in paragraphs i. through ix. of this condition. Include the magnitude, nature, and cause of any malfunction (if known), as well as the corrective action taken or preventive measures adopted (if any).

## **6.2 Specific Record Keeping and Reporting Requirements**

- 6.2.1 The Permittee shall keep operating records to determine the total amount of wood chips processed in the green hammermill (GHM), wood dryer (DRY), dry hammermills (DHM1, DHM2), pelletmills (PM1-PM10), pellet coolers (PC1, PC2) and pellet handling and storage (PHS) operations each month. The Permittee shall maintain a 12 month rolling average total of the total process rate for the above sources. These records shall be maintained in a form suitable for inspection and/or submittal to the Division, upon request.  
[PSD Avoidance per 40 CFR 52.21]

- 6.2.2 The Permittee shall calculate the monthly NO<sub>x</sub> and CO emissions from the heat source (BUR) and dryer (DRY) (measured at the WESP/RTO stack) using the records from Condition 6.2.1 and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal. Until the testing required in Section 4.2 is complete, the permittee shall calculate NO<sub>x</sub> and CO emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.4.

[391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]

$$\begin{aligned} NO_x &= (BUR/DRY \times EF_{01}) / 2000 \\ CO &= (BUR/DRY \times EF_{02}) / 2000 \end{aligned}$$

Where:

$$\begin{aligned} NO_x &= NO_x \text{ emissions (tons/month)} \\ CO &= CO \text{ emissions (tons/month)} \\ &= \text{Burner (BUR) + Dryer (DRY) production (ODT/month)} \\ EF_{01} &= NO_x \text{ emission factor (lb/ODT)} \\ EF_{02} &= CO \text{ emission factor (lb/ODT)} \end{aligned}$$

Emission Unit	Exhaust Point	Pollutant	Factor[1]
Burner (BUR) + Dryer (DRY)	WESP/RTO	NO <sub>x</sub>	0.605 lb/ODT
		CO	0.528 lb/ODT

[1] ODT = weight of wood in short tons at 11% moisture (nominal)

- 6.2.3 The Permittee shall notify the Division in writing if any monthly NO<sub>x</sub> or CO emissions (calculated per Condition 6.2.2) exceed 20.7 tons. This notification shall be postmarked by the fifteenth day of the following month and shall include measures that will be adopted to ensure minimization of NO<sub>x</sub> and CO emissions from the combustion equipment at the facility.  
[391-3-1-.02(6)(b)1]
- 6.2.4 The Permittee shall use the monthly NO<sub>x</sub> or CO emissions (calculated per Condition 6.2.2) to calculate rolling 12-month total NO<sub>x</sub> and CO emissions for each calendar month in the reporting period. These records shall be kept available for inspection or submittal to the Division, upon request.  
[391-3-1-.03(2)(c)]
- 6.2.5 The Permittee shall notify the Division in writing if any rolling 12-month rolling total NO<sub>x</sub> or CO emissions (calculated per Condition 6.2.4) exceeds 250 tons. This notification shall be postmarked by the fifteenth day of the following month and shall include measures that will be adopted to ensure minimization of NO<sub>x</sub> and CO emissions.  
[391-3-1-.03(2)(c)]

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- 6.2.6 The Permittee shall calculate the monthly PM/PM<sub>10</sub>, emissions from the facility using the records from Condition 6.2.1 and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal, upon request. until the testing required in Section 4.2 is complete, the permittee shall calculate PM emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.5.  
[PSD Avoidance per 40 CFR 52.21, 391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]

$$\text{TPM} = [ (\text{BUR/DRY} \times \text{EF01}) + (\text{DHM1, 2} \times \text{EF02}) + (\text{PC1, 2} \times \text{EF03}) ] / 2000$$

Where:

TPM	=	Total PM emissions (tons/month)
BUR/DRY	=	Burner (BUR)/Dryer (DRY) production (ODT/month)
DHM1, 2	=	Dry Hammermills (DHM1, DHM2) production (TON/month)
PC1, 2	=	Pellet Coolers (PC1, PC2) production (TON/month)
EF01	=	Total PM emission factor (lb/TON) from WESP/RTO
EF02	=	Total PM emission factor (lb/TON) from BV
EF03	=	Total PM emission factor (lb/TON) from BGH

If the emissions testing required in Section 4.2.1 reveals emission factors higher than the factors listed below, the Permittee shall comply with Condition 4.2.5

Emission Unit	Exhaust Point	Pollutant	Factor[1][2]
Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-10)	WESP/RTO	Total PM	0.060 lb/ODT
Dry Hammermills (DHM1, DHM2)	BV		0.009 lb/TON
Pellet Coolers (PC1, PC2)	BGH		0.108 lb/TON

[1] ODT = weight of wood in short tons at 11% moisture (nominal)

[2] TON = weight of wood in short tons at 5% moisture (nominal)

- 6.2.7 The Permittee shall notify the Division in writing if any monthly total PM emissions (calculated per Condition 6.2.6) exceed 20.7 tons. This notification shall be postmarked by the fifteenth day of the following month.  
[391-3-1-.02(6)(b)1]
- 6.2.8 The Permittee shall use the monthly total PM emissions (calculated per Condition 6.2.6) to calculate rolling 12-month total PM emissions for each calendar month in the reporting period. These records shall be kept available for inspection or submittal to the Division, upon request.  
[391-3-1-.03(2)(c)]
- 6.2.9 The Permittee shall notify the Division in writing if any rolling 12-month total PM emissions (calculated per Condition 6.2.8) exceeds 250 tons. This notification shall be postmarked by the fifteenth day of the following month.  
[391-3-1-.03(2)(c)]

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- 6.2.10 The Permittee shall calculate the monthly VOC emissions from the facility using the records from Conditions 6.2.1 and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection by or submittal to the Division, upon request. Until the testing required in Section 4.2 is complete, the permittee shall calculate VOC emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.4. [Title III Major Source Avoidance, PSD avoidance and 391-3-1-.02(6)(b)1]

$$\text{VOC} = [ (\text{BUR/DRY} \times \text{EF}_{01}) + (\text{DHM1, 2} \times \text{EF}_{02}) + (\text{PC1, 2} \times \text{EF}_{03}) + (\text{PHS} \times \text{EF}_{04}) ] / 2000$$

Where:

*VOC* = VOC emissions (tons/month)  
*BUR/DRY* = Burner (BUR)/Dryer (DRY) production (ODT/month)  
*DHM1, 2* = Dry Hammermills (DHM1, DHM2) production (TON/month)  
*PC1, 2* = Pellet Coolers (PC1, PC2) production (TON/month)  
*PHS* = Pellet Handling & Storage (PHS) production (TON/month)

*EF<sub>01</sub>* = VOC emission factor (lb/TON) from WESP/RTO  
*EF<sub>02</sub>* = VOC emission factor (lb/TON) from BV  
*EF<sub>03</sub>* = VOC emission factor (lb/TON) from BGH  
*EF<sub>04</sub>* = VOC emission factor (lb/TON) from PHS

Emission Unit	Exhaust Point	Pollutant	Factor[1][2][3]
Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-10)	WESP/RTO	VOC	0.123 lb/ODT
Dry Hammermills (DHM1, DHM2)	BV		0.304 lb/TON
Pellet Coolers (PC1, PC2)	BGH		0.359 lb/TON
Pellet Handling & Storage (PHS)	SILO		0.003 lb/TON

[1] ODT = weight of wood in short tons at 11% moisture (nominal)

[2] TON = weight of wood in short tons at 5% moisture (nominal)

The Dryer (DRY) VOC emission factors (EF<sub>01</sub>) shall be multiplied by 50 any time the three (3) hour average RTO combustion temperature falls below 1500 F or the temperature from the most recent test, whichever is lower.

- 6.2.11 The Permittee shall calculate VOC emissions in accordance with EPA OTM-26 via the following equation: VOC = Method 25A VOC (as propane) + Methanol (as MeOH) + Formaldehyde (as HCHO) + Acetaldehyde (as ACET) – 0.65 x Methanol (as propane). [391-3-1-.03(2)(c)]
- 6.2.12 The Permittee shall notify the Division in writing if any monthly VOC emissions (calculated per Condition 6.2.10) exceed 20.7 tons. This notification shall be postmarked by the fifteenth day of the following month. [391-3-1-.02(6)(b)1]

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- 6.2.13 The Permittee shall use the monthly VOC emissions (calculated per Condition 6.2.10) to calculate the rolling 12-month total VOC emissions for each calendar month in the reporting period. These records shall be kept available for inspection or submittal, upon request.  
[391-3-1-.03(2)(c)]
- 6.2.14 The Permittee shall notify the Division in writing if any rolling 12-month VOC emissions (calculated per Condition 6.2.13) exceeds 250 tons. This notification shall be postmarked by the fifteenth day of the following month. The Permittee shall detail the steps it will take to come into compliance with the VOC emission limit in Condition 2.1.1.  
[391-3-1-.03(2)(c)]
- 6.2.15 The Permittee shall calculate the monthly individual and total HAP emissions from the facility using the records from Conditions 6.2.1 and the and the emission factors and equations below. All emission factors and calculations shall be kept as part of the monthly records, available for inspection by or submittal to the Division, upon request. Until the testing required in Section 4.2 is complete, the permittee shall calculate HAP emissions by using the emission factors and the equation provided in this condition. If the emissions testing required in Section 4.2 reveals emission factors higher than these listed below, the Permittee shall comply with Condition 4.2.4.  
[Title III Major Source Avoidance and 391-3-1-.02(6)(b)1]

$$\begin{aligned} HAP\_1 &= [ (BUR/DRY \times EF_{01}) + (DHMI, 2 \times EF_{02}) + (PC1, 2 \times EF_{03}) + (PHS \times EF_{04}) ] / 2000 \\ HAP\_2 &= [ (BUR/DRY \times EF_{05}) + (DHMI, 2 \times EF_{06}) + (PC1, 2 \times EF_{07}) + (PHS \times EF_{08}) ] / 2000 \\ HAP\_3 &= [ (BUR/DRY \times EF_{09}) + (DHMI, 2 \times EF_{10}) + (PC1, 2 \times EF_{11}) + (PHS \times EF_{12}) ] / 2000 \\ HAP\_4 &= [ (BUR/DRY \times EF_{13}) ] / 2000 \end{aligned}$$

Where:

$$\begin{aligned} HAP\_1 &= \text{Methanol (MeOH) emissions (tons/month)} \\ HAP\_2 &= \text{Formaldehyde (HCHO) emissions (tons/month)} \\ HAP\_3 &= \text{Acetaldehyde (ACET) emissions (tons/month)} \\ HAP\_4 &= \text{Other HAP (OHAP) emissions (tons/month)} \\ \\ BUR/DRY &= \text{Burner (BUR) + Dryer (DRY) production (ODT/month)} \\ DHMI, 2 &= \text{Dry Hammermills (DHMI, DHM2) production (TON/month)} \\ PC1, 2 &= \text{Pellet Coolers (PC1, PC2) production (TON/month)} \\ PHS &= \text{Pellet Handling & Storage (PHS) production (TON/month)} \\ \\ EF_{01} &= \text{Methanol (MeOH) emission factor (lb/TON) from WESP/RTO} \\ EF_{02} &= \text{Methanol (MeOH) emission factor (lb/TON) from BV} \\ EF_{03} &= \text{Methanol (MeOH) emission factor (lb/TON) from BGH} \\ EF_{04} &= \text{Methanol (MeOH) emission factor (lb/TON) from PHS} \\ \\ EF_{05} &= \text{Formaldehyde (HCHO) emission factor (lb/TON) from WESP/RTO} \\ EF_{06} &= \text{Formaldehyde (HCHO) emission factor (lb/TON) from BV} \\ EF_{07} &= \text{Formaldehyde (HCHO) emission factor (lb/TON) from BGH} \\ EF_{08} &= \text{Formaldehyde (HCHO) emission factor (lb/TON) from PHS} \\ \\ EF_{09} &= \text{Acetaldehyde (ACET) emission factor (lb/TON) from WESP/RTO} \end{aligned}$$

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$EF_{10}$  = Acetaldehyde (ACET) emission factor (lb/TON) from BV  
 $EF_{11}$  Acetaldehyde (ACET) emission factor (lb/TON) from BGH  
 $EF_{12}$  Acetaldehyde (ACET) emission factor (lb/TON) from PHS

$EF_{13}$  Other HAP (OHAP) emission factor (lb/TON) from WESP/RTO

EF	Emission Unit	Exhaust Point	Pollutant	Factor[1][2][3]
1	Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-PM10)	WESP/RTO	MeOH	0.006 lb/ODT
2	Dry Hammermills (DHM1, DHM2)	BV		1.05E-03 lb/TON
3	Pellet Coolers (PC1, PC2)	BGH		1.3E-03 lb/TON
4	Pellet Handling & Storage (PHS)	SILO		4.85E-05 lb/TON
5	Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-10)	WESP/RTO	HCHO	0.006 lb/ODT
6	Dry Hammermills (DHM1, DHM2)	BV		2.63E-04 lb/TON
7	Pellet Coolers (PC1, PC2)	BGH		1.30E-0 3lb/TON
8	Pellet Handling & Storage (PHS)	SILO		2.43E-04 lb/TON
9	Burner (BUR) + Dryer (DRY) + Pellet Mills (PM1-PM10)	WESP/RTO	ACET	0.002 lb/ODT
10	Dry Hammermills (DHM1, DHM2)	BV		2.63E-04 lb/TON
11	Pellet Coolers (PC1, PC2)	BGH		1.04E-03 lb/TON
12	Pellet Handling & Storage (PHS)	SILO		4.85E-05 lb/TON
13	Burner (BUR) + Dryer (DRY)	WESP/RTO	OHAP	0.002 lb/ODT

[1] ODT = weight of wood in short tons at 11% moisture (nominal)

[2] TON = weight of wood in short tons at 5% moisture (nominal)

[3] OHAP = all other organic HAP

[4] The Dryer (DRY) HAP emission factors shall be multiplied by 50 any time the three (3) hour average RTOcombustion temperature falls below 1500F or the target set in the most recent performance test.

6.2.16 The Permittee shall notify the Division in writing if monthly total MeOH, HCHO, or ACET emissions (calculated per Condition 6.2.15) exceed 0.83 tons and total HAP emissions in excess of 2.08 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month.

[391-3-1-.02(6)(b)1]

6.2.17 The Permittee shall use the monthly total HAP emissions (calculated per Condition 6.2.15) to calculate the 12-month rolling total individual and combined MeOH, HCHO, ACET, and OHAP emissions for each calendar month in the reporting period. These records shall be kept available for inspection or submittal, upon request.

[391-3-1-.03(2)(c)]



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- 6.2.18 The Permittee shall notify the Division in writing if any 12-month rolling total individual MeOH, HCHO, ACET, or OHAP emissions (calculated per Condition 6.2.15) exceeds 10 tons. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with the emission limit(s) in Condition 2.1.2.  
[391-3-1-.03(2)(c)]
- 6.2.19 The Permittee shall notify the Division in writing if any 12-month rolling total combined MeOH, HCHO, ACET, and OHAP emissions (calculated per Condition 6.2.17) exceeds 25 tons. This notification shall be postmarked by the fifteenth day of the following month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with the emission limit(s) in Condition 2.1.2.  
[391-3-1-.03(2)(c)]
- 6.2.20 The permittee shall keep purchase records like dried furnish purchase, greenwood purchase, truck scale receipt and other relevant data for both hardwood and softwood to calculate the hardwood and softwood mix to demonstrate compliance with Condition 2.1.5. This calculation shall be done each month. If the softwood mix exceeds the limit in Condition 2.1.5 the permittee shall notify the Division. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with Condition 2.1.5 .  
[391-3-1-.02(6)(b)1(ii)]

